NET UNIVERSITY Programs U.S. Department of Energy

Nuclear Energy University Programs

Lessons Learned and Continuous Improvement

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Improvement and Change

The NEUP-IO continues to seek improvement. Several techniques are used including:

- Surveys (full results for 2010 were discussed last year)
- Lessons Learned. The IO office collects experiences and outcomes for integration as process improvement
- NEUP IO Exec Committee, NEAC, NEDHO, TRTR, others
- Interactions with PI's, TPOC's, others
- Congressional and public advocacy
- The purpose of all is to understand satisfaction with NEUP processes in an effort to make continued improvements



A Few Thoughts on Change

"If you always do what you've always done, you'll always get what you've already got." Generally, IT'S NOT ENOUGH.

"The only person that likes change is a wet baby."



2011 Surveys Status

- 2011 surveys have not yet been distributed.
 - Distribution lists are dependent on award announcements
 - As surveys are distributed, please respond we value your feedback
 - Surveys will originate from Vovici
- Anticipated 2011 surveys:
 - Research and Development
 - Infrastructure
 - Scholarship / Fellowship
 - This workshop (2, Workshop / Breakout Sessions)

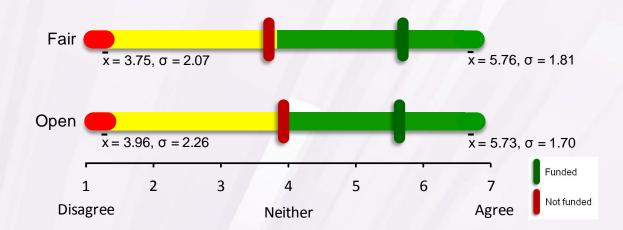




Actions From 2010 Surveys

2010 R&D Survey

- Highest frequency comment was to improve the preproposal process
 - Relevancy reviews seemed inconsistent
 - Perceived lack of technical expertise





R&D Review Changes for FY 2011

- Entire review process was updated and changed
 - Relevancy review process was reworked to better define relevancy in terms of program documents
 - Each pre-application received a technical review
 - No investigator prohibited from submitting full proposal
 - Technical review for CFP benchmarked against NSF





FY 2011 NEUP Review Process





Relevancy Review Change

Mission-relevance; aligned with technical objectives; advances the state of the knowledge within the program element; does not duplicate earlier NERI and NEUP awards, or contemporary projects.

- Unquestionably Relevant: The proposal is fully supportive of, and has significant, easily recognized and demonstrable ties to, the relevant program element(s) or mission.
- Highly Relevant: The proposal is supportive of, and has significant and demonstrable ties to, the relevant program element(s) or mission.
- Relevant: The proposal is supportive of, and has tangible ties to, the relevant program element(s) or mission.
- Moderate Relevance: The proposal is partially supportive of, and has some ties to, the relevant program element(s) or mission.
- Low Relevance: The proposal is minimally supportive of, and difficult to tie to, the relevant program element(s) or mission.
- Not Relevant: The proposal is not supportive of the relevant program element(s) or mission.



Technical Review

- Scoring guidelines and criteria are given for each of 4 areas with collection of comments:
 - Scientific and Technical Merit
 - Research Plan
 - R&D Resources and Capabilities
 - Team Qualifications

"This was a bad idea two years ago and it isn't any better now"



Scientific and Technical Merit (example)

How important is the proposed activity to advancing knowledge and understanding within the workscope area and period of performance? How well does the activity advance discovery or explore creative, original or potentially transformative concepts?

- Review Considerations:
 - Advances the state of scientific knowledge and understanding.
 - Addresses gaps in nuclear science and engineering research.
- 9-10 Outstanding scientific merit; clearly addresses gaps in scientific/engineering knowledge and understanding
- 6-8 Reasonable contribution; likely to contribute to scientific knowledge and understanding
- 3-5 Questionable scientific merit; not likely to result in meaningful advances to scientific knowledge and understanding
- 1-2 Little or no scientific merit; does not advance knowledge and understanding



NEUP/NSF Benchmarking Example

NEUP Technical Merit

- How important is the proposed activity to advancing knowledge and understanding within the workscope area and period of performance?
- How well does the activity advance discovery or explore creative, original or potentially transformative concepts?



Intellectual Merit

- How important is the proposed activity to advancing knowledge and understanding within its own field or across different fields?
- To what extent does the proposed activity suggest and explore creative, original, or potentially transformative concepts?



R&D Improvements, General

Process / Overall

- Implemented the NE Reviewer Database
- Clarified budget distribution between workscopes
- Iterated and honed workscopes for clarity and definition
 - this is a continuing process
 - "Don't ask for pre-proposals in areas that won't be funded"
 - DOE reserves the right on all funding decisions. If the highest scoring proposal in a category is not funded, none are funded.
- Did not limit the number of awards to any one university or investigator
 - DOE-NE management decision



R&D Improvements (Continued)

- We're working on the ability to retain the same numbering system from the Call for Pre-Applications to the Call for Full Proposal
- We anticipate requiring all proposers to suggest three reviewers next year



Integrated Research Programs

- Workshops recommended for better scope definition
- Proposals should include commitment letters from nonuniversity partners
- Technology deployment plan may be needed
- May need to include a review criteria based off of probability of success to complete the fully described project
- Cost to benefit ratio portion of the review needs clarification
- Careful integration of these projects into the program work conducted at National Laboratories is vital



Infrastructure

- For FY 2011, response to Major Infrastructure was limited to those universities having a reactor
- For FY 2012, we anticipate extending the Major Reactor infrastructure grant period to a time frame defined by the applicants not to exceed three years
- Process improvements for submission of applications are limited due to the use of grants.gov



Scholarship and Fellowship

- We heard your voice in FY 2010. For FY 2011, applications were accepted from permanent legal residents
- S&F forms are being revised to preclude request for personal information



Website



Visit us at www.neup.gov

- Revamped the entire site; more than just aesthetics
 - Improved navigation
 - Elimination of redundancy
 - Consistent navigation between public facing information and utility function
 - Easier access



Overarching Improvements

- Develop and implement performance metrics
- Employ communication enhancements: Developing Strategies and Opportunities
 - Social media
 - Web-based/Videoconferencing



Concluding Remarks

- We anticipate releasing FY 11 surveys soon. Please respond – your voice counts
- We attempt to act on input received to improve NEUP processes
- Several "transparent" process improvements are made each year - improvements detailed here are only those that are tangible to investigators
- Thank You for your continued input and suggestions – your opinions and experiences are important





U.S. Department of Energy



